

OFFICE OF THE NATIONAL SCIENCE BOARD (NSB)

\$5,090,000
+\$660,000 / 14.9%

The Appropriations Act that funds the National Science Foundation (NSF) contains a separate appropriation for NSF’s National Science Board. Accordingly, this FY 2023 Budget Request identifies the resources needed to support the NSB, including amounts for personnel compensation and benefits (PC&B), contract services, training, travel, supplies, materials, and equipment.

The FY 2023 Budget Request for the Office of the National Science Board is \$5.09 million, an increase of \$660,000 above the FY 2021 Actuals of \$4.43 million. This FY 2023 Request level will enable the NSB to fulfill its policymaking and oversight responsibilities for NSF and continue its statutory responsibilities as outlined in the NSF Act, including activities related to the authorization of major research facilities projects.

NSB Funding					
(Dollars in Millions)					
	FY 2021 Actual	FY 2022 (TBD)	FY 2023 Request	Change over	
				FY 2021 Actual Amount	Percent
Total	\$4.43	\$4.50	\$5.09	\$0.66	14.9%
Full-Time Equivalents (FTEs)	17	17	18	1	5.9%

Appropriations Language

For necessary expenses (including payment of salaries, authorized travel, hire of passenger motor vehicles, the rental of conference rooms in the District of Columbia, and the employment of experts and consultants under section 3109 of title 5, United States Code) involved in carrying out section 4 of the National Science Foundation Act of 1950 (42 U.S.C. 1863) and Public Law 86–209 (42 U.S.C. 1880 et seq.), ~~\$4,600,000~~**\$5,090,000**: Provided, That not to exceed \$2,500 shall be available for official reception and representation expenses.

National Science Board			
FY 2023 Summary Statement			
(Dollars in Millions)			
	Enacted/ Request	Expired	Obligations Actual/ Estimates
FY 2021 Appropriation	\$4.50	-\$0.07	\$4.43
FY 2022 Annualized CR	4.50		4.50
FY 2023 Request	5.09		5.09
\$ Change from FY 2022 Annualized CR			\$0.59
% Change from FY 2022 Annualized CR			13.1%

National Science Board in Context

The NSB, established by the NSF Act of 1950, has dual responsibilities to: provide national science policy advice to the President and Congress and establish policies for NSF within the framework of applicable national policies as set forth by the President and the Congress. The Board consists of 24 presidentially appointed members plus the Director of NSF as an ex officio member. Representing the broad U.S. science and engineering (S&E) research and education community, the Board serves collectively as an advisory body on S&E issues critical to the Nation. Board members serve six-year terms on staggered appointments and are drawn from industry, academe, non-profit organizations, government, and professional scientific societies representing the breadth of S&E disciplines. They are selected to represent all areas of the Nation based on their eminence in research, education, or public service.

The Board currently convenes at least four formally scheduled public meetings per year, with additional meetings as needed, to review and approve major NSF awards; provide guidance on new programs; oversee and provide policy direction to NSF; oversee the lifecycle of large facilities, including conducting site visits; and address significant S&E-related national policy issues. The Board initiates and conducts studies and reports on a range of policy topics and engages NSF's stakeholders nationwide. The Board reviews NSF's priorities to ensure progress and consistency along the strategic direction set for NSF and to ensure balance among new investments and core programs.

Policy Responsibilities

The Board examines issues of importance to the S&E research and education communities, in general, and to NSF, in particular. Topics are determined through requests from Congress or the President, and as the Board identifies in consultation with the community and NSF management. Recent reports have examined topics such as the skilled technical workforce, mid-scale research infrastructure, operations and maintenance costs for NSF's large facilities, and the rise of China in S&E.

In May 2020, the Board released its *Vision 2030*¹ report, which provides a framework for Board oversight and accountability for the next decade. *Vision 2030* lays out a roadmap focused on four goals: delivering benefits from research, developing STEM talent for America, expanding the geography of innovation, and fostering a global science and engineering community. These goals align with and support Administration priorities, such as advancing equity, tackling the climate crisis, advancing management and performance to deliver results, and emphasizing evidence and evaluation in priority policy and mission areas.

In its first year of *Vision 2030* implementation, the NSB conducted more than 25 engagement activities with federal and state-level leaders as well as academic, scientific, and education organizations; met with Members of Congress and congressional committee staff; and engaged with the current and previous Administrations. It also highlighted issues related to talent, diversity, equity, and inclusion, and reaching the "Missing Millions" (i.e., people from under-represented groups in the S&E workforce) through several external panels held during NSB meetings and by engaging NSF in discussions about the agency's strategies, goals, and metrics for measuring progress in these areas. In addition, the Board worked closely with NSF leadership to ensure that the agency is ready for an increased budget,

¹ www.nsf.gov/nsb/publications/2020/nsb202015.pdf

expanded mission, and new directorate focused on technology, innovation, and partnerships (TIP), which will contribute significantly to achieving the NSB's *Vision 2030* goals of delivering benefits from research, developing STEM talent, and expanding the geography of innovation.

Structure

The Board has several standing committees to assist with its responsibilities.

The **Executive Committee** (EC) includes the Director of NSF, who chairs the Committee, and four elected members from the Board, of whom two are the NSB Chair and Vice-Chair. The Board has delegated to this Committee its authority to approve awards in the rare instances when immediate action is required between Board meetings.

The **Committee on Oversight** (CO) conducts independent oversight of NSF's operations, processes for risk management, audit plans and results, and processes for complying with laws and regulations; reviews Office of the Inspector General (OIG) activities and NSF management responses; monitors audits and makes related recommendations to the Board; and oversees the Board's compliance with the Sunshine Act.

The **Committee on Strategy** (CS) provides a forum for developing the Board's strategic discussions of NSF's budget, programs, organization structure and agency vision; makes recommendations to the Board on annual Budget Requests and quadrennial Strategic Plans; and provides strategic guidance to the Board on NSF's programs.

- The **Sub-Committee on Technology, Innovation, and Partnership (S-TIP)** was constituted in August 2021 to consult with the NSF Director on strategies, goals, and organizational changes to realize the agency's new TIP strategic priority and identify, for NSB discussion, relevant governance matters.

The **Committee on National S&E Policy** (SEP) oversees development and production of the congressionally-mandated *Science and Engineering Indicators (Indicators)* report in collaboration with NSF's National Center for Science and Engineering Statistics (NCSES); helps ensure that the S&E information and policy resources developed by the NSB are high-quality, policy-relevant, and accessible in order to meet stakeholder needs; and helps fulfill the NSB's charge to provide ongoing information and policy advice to Congress and the President on S&E research, education, and workforce issues.

The **Committee on Awards and Facilities** (A&F) addresses strategic issues and recommends policies to the Board related to awards and MREFC projects; makes recommendations to the Board on awards and facilities; and provides lifecycle oversight on facilities and awards.

The **Committee on External Engagement** (EE) leads the NSB's communication and engagement efforts with government, industry, the public and the research and education communities, and helps the Board advance the pursuit of national policies for the promotion of research and education in S&E.

- The **Subcommittee on Honorary Awards** (AWD) reviews nominations for two awards established by the Board: the Vannevar Bush Award and the Public Service Award.

Ongoing activities of the Board include review and approval of:

- Large awards, MREFC projects, and other proposals, as needed;
- NSF’s Management Response to the OIG Semi-annual Reports to Congress;
- Transmittal of the NSF, OIG, and NSB budget submissions to the Office of Management and Budget;
- Priority order of projects in the MREFC Account;
- Midscale Research Instrumentation-2 awards (and oversight of the Midscale Research Instrumentation-1 awards); and
- Inclusion of new projects requiring funding under the MREFC Account.

The Board also reviews and makes recommendations on:

- NSF’s financial management reports;
- The operation of NSF’s merit review system, and;
- NSF’s research infrastructure portfolio.

Financial Discussion

This FY 2023 Request will enable the NSB to fulfill its policymaking and oversight responsibilities for NSF and continue its statutory responsibilities as outlined in the NSF Act, including activities related to the authorization of major research facilities projects. The Request will enhance the Board’s ability to provide strategic guidance and conduct the oversight required as NSF’s budget and mission expand with a new TIP strategic focus, to engage with stakeholders, and to respond to Congressional requests.

Office of the National Science Board
Personnel Compensation and Benefits and Other Operating Expenses
(Dollars in Thousands)

	FY 2021 Actual	FY 2022 (TBD)	FY 2023 Request	Change over	
				FY 2021 Actuals Amount	Percent
Personnel Compensation & Benefits (PC&B) ¹	\$3,084	-	\$3,800	\$716	23.2%
Staff Development & Training	16	-	21	5	31.3%
Advisory & Assistance Services	1,301	-	991	-310	-23.8%
Travel & Transportation of Persons	-	-	250	250	N/A
Communications, Supplies, & Equipment	31	-	25	-6	-19.4%
Representation Costs	-	-	3	3	N/A
Total	\$4,432	-	\$5,090	\$658	14.8%
Full-Time Equivalents (FTE)	17	17	18	1	5.9%

¹ PC&B includes base salary costs and anticipated within grade and promotion increases.

Personnel Compensation and Benefits

The Board’s FY 2023 Request supports a core of full-time policy, communications, administrative, legal, and executive secretariat staff. In addition to providing institutional memory for the Board, the Board Office staff provides both the resources and expertise for coordinating and conducting science and education policy analyses and developing and implementing broad communication and outreach programs. Staff also advise the Board on legal aspects of its policies and activities and provides operational and administrative support that are essential for the Board to fulfill its mission. The Request reflects planned increases in NSB Office staff pay, including a 4.6 percent cost-of-living

adjustment, and assumes in-person Board meetings and activities in FY 2023. It will allow the NSB Office to increase its staff by one additional FTE. This staffing level will enable the NSB Office to support the NSB more effectively in exercising its governance role by working with NSF to implement *Vision 2030* and advance the Administration's critical priorities, particularly with accountability related to improving diversity, inclusion, equity, and accessibility in STEM education and the S&E research workforce; measure progress towards reaching the Missing Millions; and ensure success of the new TIP directorate.

Other Operating Expenses

The Staff Development and Training budget line supports various training events such as Contracting Officer Representative (COR) training and recertification and federal leadership training for one NSBO management staff member, as well as facilitation services for staff retreats that have a professional development component.

The Board's Advisory and Assistance Services budget line includes some of the resources needed to produce reports such as the Congressionally mandated *Indicators*. To facilitate accessibility and use of *Indicators* data in policy decisions, analysis, and assessing progress toward *Vision 2030* goals and other critical national S&E priorities, the Board creates interactive digital products, including an electronic state data tool that allows for more frequent and timely updates and state one-pagers that highlight select data by state. Other items in the Advisory and Assistance Services line support multimedia strategies, such as data-driven dynamic graphics, film, and video, to increase awareness and use of the Board's products by stakeholders; maintenance of an electronic official records management system, which enables compliance with federal records requirements; the webcasting and archiving of all open Board meetings; transcription services necessary for compliance with the *Government in the Sunshine Act*; and board book management software, which facilitates effective and efficient NSB meetings. This budget line also supports website maintenance costs.

Anticipating a need for project management (PM) support due to increased Board activity with the release of *Vision 2030* and using savings accrued from the lack of NSB member travel due to COVID-19 pandemic restrictions, in FY 2020/2021, the NSB Office procured the services of a PM contractor within the Board's Advisory and Assistance Services budget line. This contract has supported the introduction of a PM software tool and capacity building among NSB Office staff to plan NSB *Vision 2030* and other activities and track progress more efficiently. The FY 2023 Request will provide the resources necessary to continue contracted PM support at 50 percent of the FY 2022 level, which would ensure more sustainable PM capacity building of staff and lead to greater support of the Board as its activities increase in line with NSF's expansion.

The NSB's Travel and Transportation of Persons budget line primarily covers costs related to Board member travel to NSF headquarters for four annual meetings and a member-only retreat, for oversight of NSF's large programs and facilities, and for engaging stakeholders. In implementing its *Vision 2030*, the Board convenes partners and stakeholders for discussions about specific action items in the Vision Roadmap and invites speakers to participate on panels at NSB meetings. These activities help disseminate the Board's vision, galvanize momentum around key NSF and Administration priorities, elevate and understand the concerns of segments of the S&E community that are often unheard, and cultivate existing and new partners. Since the beginning of the COVID-19 pandemic, the Board has conducted such activities virtually but plans to return to in-person events when

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circumstances allow and when cost-effective.

The Communications, Supplies, and Equipment budget line funds communications services and information technology. This budget line item includes the refreshment of IT equipment in accordance with NSF's Workstation Refresh Cycle schedule, funding of wireless equipment, and purchase of office supplies upon return to on-site facilities.

The FY 2023 Request will support the Board's efforts to strengthen the U.S. S&E enterprise through its policy and information-related activities. Specifically, the Request will help the NSB improve the usefulness of the resources it produces to ensure that Congress, the Administration, academia, private industry, and the public continue to have access to timely, comprehensible, and objective S&E data and policy guidance.

The Request sets aside funds that the NSB will use, if necessary, to cover costs associated with reception and representation activities connected to official NSF business, per GAO guidance.